



## MACKEREL M

## Description

**MACKEREL M** is a premium quality, general purpose, emulsifiable fluid especially suitable for cutting and grinding operations where maximum cooling is desired. It forms with water a stable white milky emulsion having high film strength and providing balanced lubricity and machinability.

## Properties / Advantages

- Versatile in use, can be used in a broad range of applications.
- Excellent stability and resistance to emulsion breakdown.
- Excellent protection against rust and corrosion.
- Excellent resistance to bacterial and fungal attack, providing long lifetime of the charge.
- Maximum cooling capacity.
- Very good affinity to the metal surface for homogenous wetting lubricating film.
- High lubricity to reduce friction and wear.
- Foam-free operation.
- Very good filterability.
- Very low misting to assure visibility and contamination of the surrounding area.

## Application Guidelines

- Water quality must be suitable for preparing emulsion. Dirty, fuzzy, fragrant and extremely hard water should not be used for this purpose.
- Clean water should be taken into a bowl or tank. Depending on the application, required amount
  of Mackerel M-HR should be slowly added into water. While adding oil, emulsion should be mixed
  well.
- Always add the oil concentrate to the water phase and not vice versa.
- Mixing temperatures are not critical, but for best results the neat oil and water should be at room temperature between 20 and 25 °C.
- Demineralized water is recommended for daily top-up for maximum charge life and excellent surface finish.
- During stoppage times emulsion should be circulated in order to prevent the break up emulsion and to prevent bacterial growth. This could be done circulating emulsion 1-2 hours every day during stoppage.

**Recommended Dosage:** Depending on the applications it can be mixed inwith either soft water or water of normal degree of hardness to oil proportion from 5 to 25% for machining and 1,5 to 3% for grinding.







Technical Properties

Property	Test Method	Typical Value
Appearance	-	C&B
Odor	-	Typical
Density at 15 °C, gr/cm³	ASTM D 4052	0.894
Flash Point, °C (COC)	ASTM D 92	>180
Viscosity at 40 °C , mm²/s	ASTM D 445	23
Pour point, °C	ASTM D 97	<-27
Refractive Index	ASTM D 1218	1.490
Emulsion (5% demineralize water)		
Appearance	-	Milky White
рН	-	8.88
Emulsion Stability, 24 hour	-	stable

<sup>\*</sup> The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modification is reserved.

Health & Safety

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet.

Packaging

180 kg drum, 850 kg IBC.

\*Revision Date/No:12.11.2013/02

